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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/507,075	06/02/2005	Berthold Leimbach	H0075.70099US00	4427
23628 7590 11/02/2007 WOLF GREENFIELD & SACKS, P.C. 600 ATLANTIC AVENUE BOSTON, MA 02210-2206			EXAMINER DUMAS, NKEISHA J	
			ART UNIT 3632	PAPER NUMBER
			MAIL DATE 11/02/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/507,075	Applicant(s) LEIMBACH, BERTHOLD	
	Examiner Nkeisha J. Dumas	Art Unit 3632	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 September 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 30-56 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 30-56 is/are rejected.
- 7) ☒ Claim(s) 32,33,38,39 and 45 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>6/2/2005</u> . | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. The following correspondence is a non-final Office Action for application no. 10/507,075 for a TRIPOD HEAD, IN PARTICULAR CAMERA TRIPOD HEAD, filed on 9/9/2004. Claims 30-56 are pending.

#### ***Election/Restrictions***

2. Applicant's election of Species V, Figs. 3-11, in the reply filed on 8/15/2007 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

#### ***Priority***

3. Applicant is advised of possible benefits under 35 U.S.C. 119(a)-(d), wherein an application for patent filed in the United States may be entitled to the benefit of the filing date of a prior application filed in a foreign country.

4. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

#### ***Claim Objections***

5. Claim 32 recites the limitation "the course" in the second line. There is insufficient antecedent basis for this limitation in the claim.

6. Claim 33 recites the limitation "the course" in the second line. There is insufficient antecedent basis for this limitation in the claim.

7. Claim 33 recites the limitation "the one end" in the second line. There is insufficient antecedent basis for this limitation in the claim.

8. Claim 33 recites the limitation "the assignment" in the third line. There is insufficient antecedent basis for this limitation in the claim.
9. Claim 33 recites the limitation "the pre-tension of said pressure spring" in the third line. There is insufficient antecedent basis for this limitation in the claim.
10. Claim 33 recites the limitation "the distance" in the fourth line. There is insufficient antecedent basis for this limitation in the claim.
11. Claim 33 recites the limitation "the counteracting compensating" in the fifth line. There is insufficient antecedent basis for this limitation in the claim.
12. Claim 33 recites the limitation "the aim" in the tenth line. There is insufficient antecedent basis for this limitation in the claim.
13. Claim 33 recites the limitation "the value" in the tenth and eleventh lines. There is insufficient antecedent basis for this limitation in the claim.
14. Claim 33 recites the limitation "the fraction" in the tenth line. There is insufficient antecedent basis for this limitation in the claim.
15. Claim 33 recites the limitation "the pulling member's point of exit" in the sixteenth line. There is insufficient antecedent basis for this limitation in the claim.
16. Claim 38 recites the limitation "the one end" in the first line. There is insufficient antecedent basis for this limitation in the claim.
17. Claim 38 recites the limitation "said movable support means" in the second line. There is insufficient antecedent basis for this limitation in the claim.
18. Claim 38 recites the limitation "the other end" in the second line. There is insufficient antecedent basis for this limitation in the claim.

19. Claim 39 recites the limitation "said ends" in the second line. There is insufficient antecedent basis for this limitation in the claim.

20. Claim 45 recites the limitation "the region" in the third line. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 112***

21. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

22. Claims 30-56 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

23. Regarding claim 30, applicant has not described how the invention stays in position at the tilt angle. That is, once the tripod head is tilted to the desired angle, it appears that the return moment will cause the head to tilt toward an opposite direction or further in the same direction based on the weight of the head and the tilt angle. Applicant does not describe the mechanism for ensuring how the tripod head remains at the desired tilt angle. For example, applicant does not describe any type of stopper or stopping device for preventing the head from tilting out of the tilt axis. The specification appears to be silent on this matter. Clarification is requested.

24. Claim 30 contains a limitation stating that the "means for compensating the tilt moment has a carrier assembly that is attached at a position some distance away from said tilt axis on said tiltable assembly...." Based on the drawings contained in the application, it does not appear that the carrier assembly is attached "on said tiltable assembly." As shown in Fig. 4, the tiltable assembly has been removed from the base, and yet the carrier assembly remains fixed on the base, thus demonstrating that the carrier assembly is not attached on the tiltable assembly. Clarification of the claim language is requested.

25. Claims 30 and 41 contain limitations stating that the pulling member "[starts] from said carrier." This language is indefinite and unclear because applicant has failed to describe at what point on the carrier the pulling member starts. For example, the claims do not state whether the pulling member starts at the end, middle, top or bottom of the carrier.

26. Claims 38 and 42 contain limitations regarding "one end." These limitations are unclear because applicant has not described to which end of the pulling member the "one end" is referring.

27. Claim 42 recites the limitation "wherein said one end of said pulling member is connected to said movable support means" and "said pulling member is connected to said carrier." These limitations are unclear and indefinite because applicant has not described how or where the pulling member is connected to the movable support means, and similarly, applicant has not described how or where the pulling member is connected to the carrier.

28. The Examiner notes that although some elements of applicant's invention are not addressed in the prior art rejection below, the applicant should not assume that the claims are allowable. The Examiner did not completely understand the invention and therefore searched and rejected the claims based on the Examiner's best understanding of the invention.

***Claim Rejections - 35 USC § 102***

29. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

30. Claims 30-32, 34-42, 48-50, 52-54 and 56 are rejected under 35 U.S.C. 102(b) as being anticipated by O'Connor (U.S. Pat 4,083,524).

As best understood, regarding claims 30, 31 and 41-42, O'Connor teaches a tripod head (Fig. 8) comprising: a base member (28c), a tiltable assembly (30), which, on the one hand, is connected to said base member so as to be rotatable about a tilt axis and to which, on the other hand, a mounting, particularly a camera mounting (22), is securely attachable, a means for compensating a tilt moment that occurs during the tilt movement, said means having at least one energy-storing member (spring, 62, 64) that is freely supported on said base member, wherein said means for compensating the tilt moment has a carrier assembly (48) that is attached at a position some distance away from said tilt axis on said tiltable assembly and which acts on said energy-storing member when said mounting tilts and as a result said energy-storing member exerts,

via said carrier assembly, an essentially sinusoidal return moment on said tiltable assembly and thus on said mounting, and said carrier assembly has at least one carrier (56, 66) that is movable with said tiltable assembly around said tilt axis and has at least one pulling member (82, 88) that interacts with said carrier and said energy-storing member (via lower yoke 66), with said pulling member, starting from said carrier, running essentially perpendicular to said tilt axis toward a deflection point (at 86), and after the deflection, said pulling member running essentially parallel to said tilt axis.

As best understood, regarding claim 32, O'Connor teaches the head of claim 30 wherein the pulling member is deflected or turned back at least once during the course between said carrier and energy-storing member (via member 42).

As best understood, regarding claim 34, O'Connor teaches the head of claim 30, wherein a set of pressure springs (62, 64) is provided.

As best understood, regarding claim 35, O'Connor teaches the head of claim 31, wherein at least one pressure spring is a helical spring.

As best understood, regarding claim 36, O'Connor teaches the head of claim 31, wherein at least one pressure spring is aligned essentially parallel to said tilt axis and can be compressed in this direction.

As best understood, regarding claim 37, O'Connor teaches the head of claim 31, wherein said at least one pressure spring is clamped between a stationary support means (28c) and a movable support means (52), which is movable particularly in the direction of said tilt axis.



As best understood, regarding claim 38, O'Connor teaches the head of claim 30, wherein one end of said pulling member is connected to a movable support means (108) and the other end is connected to said carrier (via members 62, 64 and 66).

As best understood, regarding claims 39-40, O'Connor teaches the head of claim 30, wherein said deflection point located between said ends of said pulling member is formed by a deflector roll (86) which is rotatable around its own roll shaft.

As best understood, regarding claim 48, O'Connor teaches the head of claim 30, wherein at least one carrier is rotatable around a shaft that is parallel to said tilt axis.

As best understood, regarding claim 49, O'Connor teaches the head of claim 30, wherein said at least one carrier is perpendicular to said tilt axis.

As best understood, regarding claim 50, O'Connor teaches the head of claim 42, wherein said pulling member passes through or loops around said carrier (at 72, 78).

As best understood, regarding claim 52 and 54, O'Connor teaches the head of claim 30, wherein said pulling member is inextendible.

As best understood, regarding claim 53, O'Connor teaches the head of claim 52, wherein said pulling member is prestretched.

As best understood, regarding claim 56, O'Connor teaches the head of claim 30, wherein said carrier is a carrier pin aligned parallel to said tilt axis.

### ***Claim Rejections - 35 USC § 103***

31. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

32. Claims 33 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Connor (U.S. Pat 4,083,524).

As best understood, regarding claim 33, O'Connor teaches the head of claim 30 but does not specifically teach that the tripod head satisfies the formula set forth in claim 33, however, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to construct the head such that it satisfies such a formula since, where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable result variable involves only routine skill in the art.

As best understood, regarding claim 51, O'Connor teaches the head of claim 30 where the pulling member is clamped on or around the carrier, but does not specifically teach that the pulling member is clamped within said carrier. It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to construct the head such that the pulling member is clamped within the carrier in order to establish a tighter connection between the pulling member and the carrier to prevent the pulling member from disconnecting from the carrier.

***Allowable Subject Matter***

33. As best understood, claims 43-47 and 55 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims. The Examiner notes that the claims are largely incomprehensible based on the

numerous objections and rejections indicated above and, although subject matter has been indicated as allowable based on the Examiner's best understanding of the invention, the allowability of these claims may be withdrawn upon correction of the errors indicated above.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nkeisha J. Dumas whose telephone number is (571) 272-5781. The examiner can normally be reached on Monday - Friday, 7:00 a.m. - 3:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Glessner can be reached on (571) 272-6843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Kimberly Wood/

Kimberly Wood

Primary Examiner

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